

Work Order ID 63736

Friday, November 12, 2010 8:28:28 AM



Page 1

Item ID: D3943-051

Accept



Setup Start



Revision ID:

Stop



Item Name: Handle Assembly

Start Date: 11/12/2010 Start Qty: 5.00



Cust Item ID:

Required Date: 11/19/2010 Req'd Qty: 5.00



Customer:

Reference:

Approvals:

Process Plan:

H

Date:

10-11-12

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3943

C

100

Weld per dwg A/R Steel rod Batch: *M108350* 0.00

Large Fab

Memo

0.00

Large Fab

Assemble with handle as per dwg

EL 11-4-13 (5)

110

QC5- Inspect part completeness to step on W/O 0.00



QC

Memo

0.00

Quality Control

ml 11 04 14 (5)

120

QC9- Inspect visual per QS1004- Fusion Welds 0.00



QC

Memo

0.00

Quality Control

CF 11-04-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work
Friday, 1

Work Order ID 63736

Friday, November 12, 2010 8:28:28 AM



Page 2

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Setup Start



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Customer:

Reference:

Approvals:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

Dart A

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES							
DATE	DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part N

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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H:\FORM

H:\FORMS\Quality Assurance\approved QA\NCRWO RevE

Picklist Print

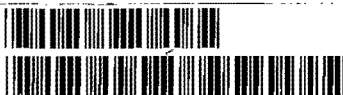
Friday, November 12, 2010 8:28:33 AM

Page 1

Work Order ID: 63736

Parent Item: D3943-051

Parent Item Name: Handle Assembly



Start Date: 11/12/2010

Required Date: 11/19/2010

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP RevA: add DEO DD 09.11.18 verified by:JLM
dwg REV.C DD 10.02.22 verified by:EC
IPP Rev:B as per

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3943-5		Manufactured	No			100	Each	10.0000	1	5			
Plate													

Location Loc Qty Loc Code

ST098 10

55711 10

D3943-7		Manufactured	No			100	Each	11.0000	2	10			
Stud													

Location Loc Qty Loc Code

ST099 11

52980 11

CL 11-4-13

5

CL 11-4-13

10

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ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5		X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
41	1			S-1475	SPRING	REID SUPPLY
42	1			3408A59	BALL PLUNGER	McMASTER CARR
43	1			HX-15	SOCKET HEAD CAP SCREW 1/4-20 UNC X 0.75 LG	HASKINS
44	1			HX-16	SOCKET HEAD CAP SCREW 1/4-20 UNC X 1.0 LG	HASKINS

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 6-3736
PS 10-11-12

RELEASED
2010-10-18
JW

C	RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001	CP	10.01.26
B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. REV. C D3943 SHEET 1 OF 5 TITLE SCALE GROSS WEIGHT TOW CRANK ASSY NTS COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT PERMISSION FROM DART AEROSPACE LTD.	
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DE APPR.	N/A		
DATE	10.01.26		

W/O:		WORK ORDER CHANGES					
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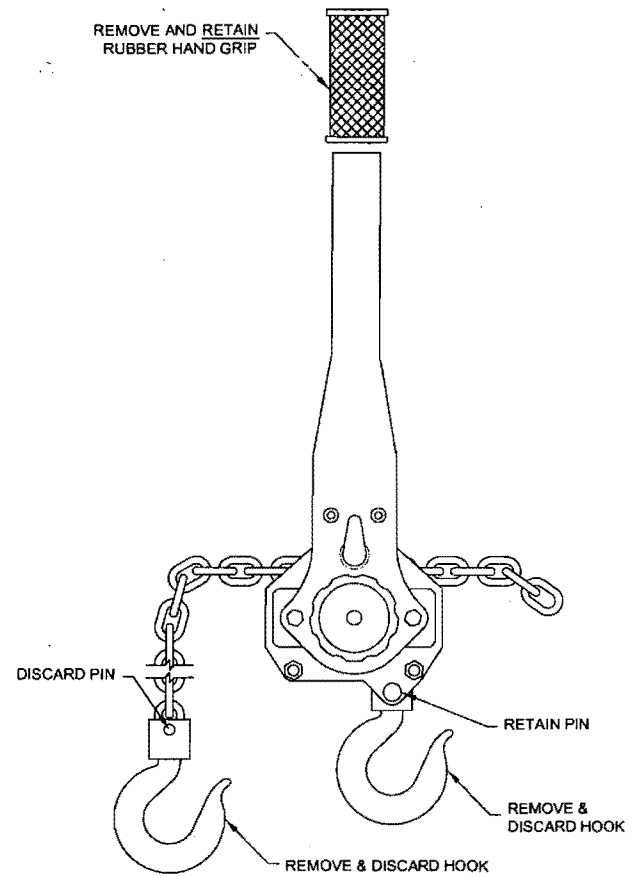
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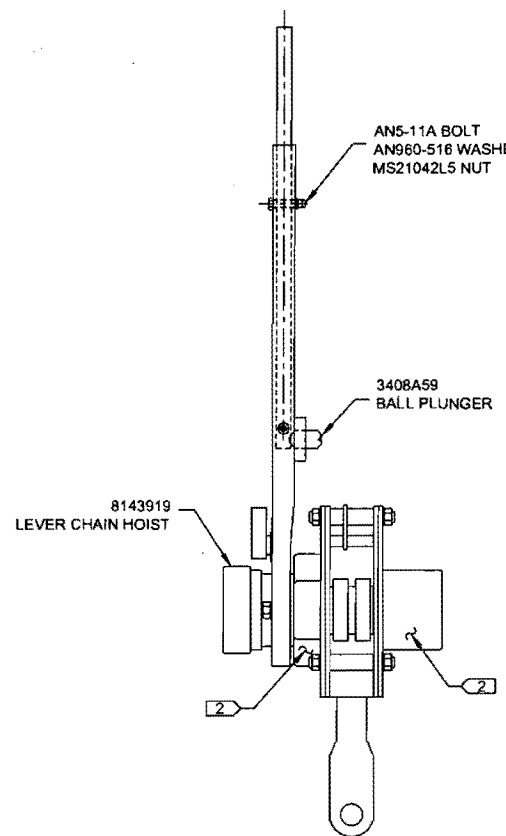
8 7 6 5 4 3 2 1

REMOVE AND RETAIN
RUBBER HAND GRIP



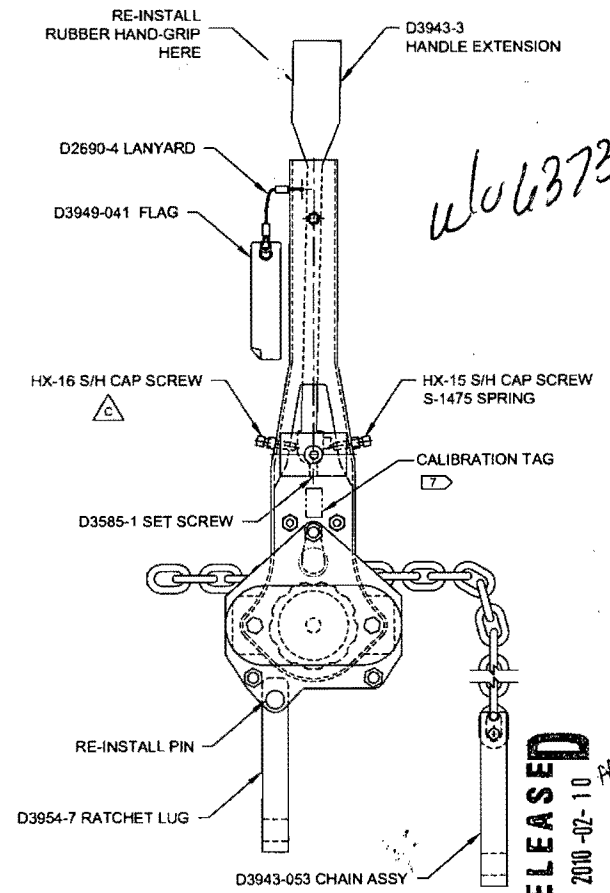
8143919 LEVER CHAIN HOIST
(SHOWN PRIOR TO MODIFICATION)
(CHAIN SHOWN SHORTENED FOR CLARITY)

AN5-11A BOLT
AN960-516 WASHER
MS21042L5 NUT



(CHAIN NOT SHOWN FOR CLARITY)

RE-INSTALL
RUBBER HAND-GRIP
HERE







(CHAIN SHOWN SHORTENED FOR CLARITY)

D3943-041 GROUND HANDLING CRANK ASSEMBLY

NOTES -041:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3943-041" USING FINE POINT PERMANENT INK MARKER
- 7) CALIBRATION TAG PER DART QSI 008 4.4 (ZN C1-2)

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CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3943	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	10.01.26	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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R 2010-02-10

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

D3943-1 HANDLE

2 PL

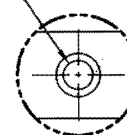
9.75

2.00

11-04-83

Ø0.31
THRU

0.41

D3943-7 STUD
2 PLTHREAD 1/2-20 UNC-2B
2 PLTHREAD 1/2-20 UNC-2B
THRUVIEW A-A
A5-3
(SCALE 2X) B5-3

2 PL

9.37

A B1-3

A B1-3

D3943-5 PLATE

D3943-051 HANDLE ASSEMBLY

NOTES -051:

- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) MASK ALL THREADS PRIOR TO POWDER COATING

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MFG. APPR.	JP	D3943	SHEET 3 OF 5
APPROVED	JP	TITLE	SCALE
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Wb 63784

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

D3943-9 CHAIN

D3954-5 CHAIN LUG

C

wb 6375

B

D3954-9 GWT PIN

D3943-053 CHAIN ASSEMBLY

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2010-02-10

NOTES -053:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER QSI 004
- 9) MASK CHAIN FROM THIS POINT ON PRIOR TO POWDER COATING

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APPROVED	<i>JP</i>	SHEET 4 OF 5
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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
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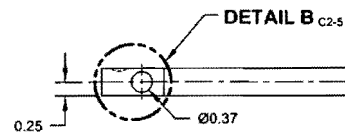
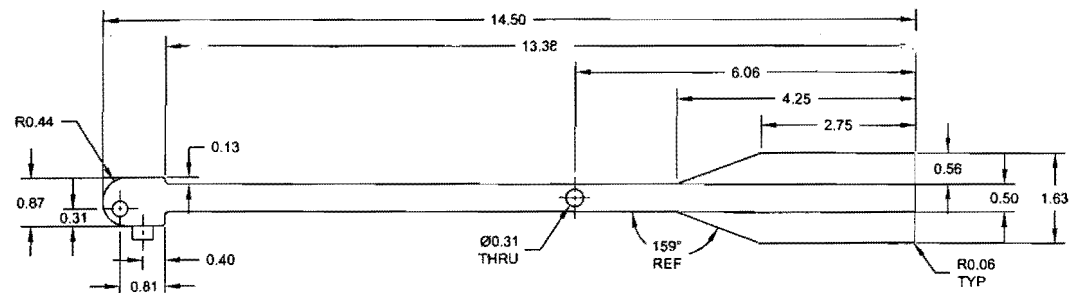
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

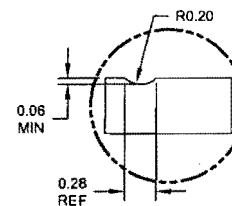
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8 7 6 5 4 3 2 1

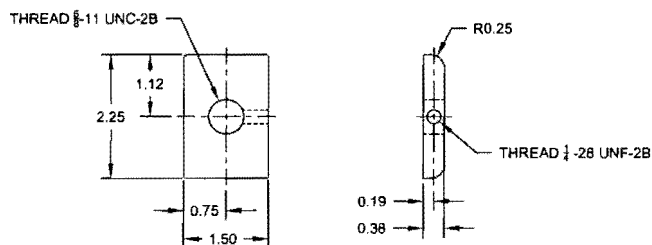


D3943-3 HANDLE EXTENSION

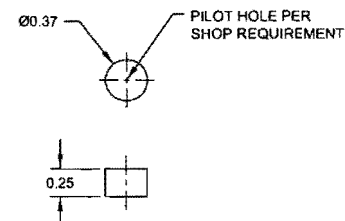


DETAIL B-B C7-5
(SIMPLE DETAIL)
(SCALE 2X)

ale 63735



D3943-5 PLATE



D3943-7 STUD
(SCALE 2X)

NOTES -11/-13:

1) MATERIAL -3 & -5: MILD STEEL, SHEET
AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S

OR: MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B

-7: MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R

2) FINISH -3: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
-5 & -7: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

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MFG. APPR.	<i>[Signature]</i>	D3943 SHEET 5 OF 5
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DE APPR.	<i>[Signature]</i>	GROSS WEIGHT TOW CRANK ASSY NTS
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